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1
       IN THE UNITED STATES DISTRICT COURT
2
        FOR THE NORTHERN DISTRICT OF OHIO
3
                EASTERN DIVISION
5
     IN RE: NATIONAL : HON. DAN A.
6
     PRESCRIPTION OPIATE
                            : POLSTER
     LITIGATION
7
     APPLIES TO ALL CASES : NO.
8
                             : 1:17-MD-2804
9
            - HIGHLY CONFIDENTIAL -
10
    SUBJECT TO FURTHER CONFIDENTIALITY REVIEW
11
12
                 April 29, 2019
13
14
15
16
                 Videotaped deposition of
    KATHERINE KEYES, Ph.D., taken pursuant to
17
    notice, was held at the law offices of
    Lieff Cabraser, LLP, 250 Hudson Street,
18
    New York, New York beginning at 9:08
    a.m., on the above date, before Michelle
19
    L. Gray, a Registered Professional
    Reporter, Certified Shorthand Reporter,
20
    Certified Realtime Reporter, and Notary
    Public.
21
22
           GOLKOW LITIGATION SERVICES
        877.370.3377 ph | 917.591.5672 fax
23
                 deps@golkow.com
2.4
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evidence that is described in that 1 2 section, I think my scientific opinion is that there is a causal relationship 4 between prescription opioid use and 5 heroin use. 6 And it's not based on any 7 one particular study. It's based on 8 the -- the weight of the evidence. 9 But you would agree that 10 none of the articles that you cite 11 conclude that there is a causal 12 relationship between prescription opioid 13 use and heroin use? 14 MS. RELKIN: Objection to 15 form. 16 THE WITNESS: So what I 17 would agree with is that someone 18 trained in epidemiology who is evaluating the evidence, would 19 20 conclude that there is a causal 21 relationship between prescription 22 opioid use and heroin use. Any 23 one particular study doesn't make that case, it's the body of 2.4

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1
           evidence.
2
    BY MR. HERMAN:
3
                 And none of the studies that
4
    you cite conclude that there is a causal
5
    relationship between prescription opioid
6
    use and heroin use, correct?
7
                  MS. RELKIN: Objection to
8
           form.
9
                  THE WITNESS: Again, I -- I
10
           think any one particular study is
11
           not sufficient to make that kind
12
           of claim. What can make a claim
13
           is the body of evidence that is
14
           evaluated.
15
                  And so I evaluated the body
16
           of evidence and made -- came to
17
           the conclusion that there is a
18
           causal relationship.
19
    BY MR. HERMAN:
20
                  You agree that only a small
           Ο.
21
    portion -- a small portion of people who
22
    use prescription opioids later use
23
    heroin?
24
                  MS. RELKIN: Objection to
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1	and agreed at the top of the
2	paragraph.
3	THE WITNESS: You know,
4	again, I think the evidence base
5	overall for this particular topic
6	is quite consistent in showing a
7	positive association, which is
8	what Compton states in that
9	paragraph. And that we use those
10	kinds of data in observational
11	epidemiology when we're drawing
12	conclusions.
13	BY MR. HERMAN:
14	Q. If you were writing for a
15	professional journal would you draw a
16	conclusion about causality from the
16	
	conclusion about causality from the
17	conclusion about causality from the observational descriptive studies that
17	conclusion about causality from the observational descriptive studies that Dr. Compton looked at?
17 18 19	conclusion about causality from the observational descriptive studies that Dr. Compton looked at?  MS. RELKIN: Objection to
17 18 19 20	conclusion about causality from the observational descriptive studies that Dr. Compton looked at?  MS. RELKIN: Objection to form.
17 18 19 20 21	conclusion about causality from the observational descriptive studies that Dr. Compton looked at?  MS. RELKIN: Objection to form.  THE WITNESS: So I do write

1 conclusion in any forum, that the 2 available literature is consistent 3 with a causal association. 4 I mean, even Wilson Compton 5 in this sentence said that, "It's 6 highly suggestive and plausible 7 given their common pharmacologic 8 principles." 9 I think I would go a step 10 further given that we now have 11 three more years of data since 12 this was published. 13 BY MR. HERMAN: 14 So you disagree with his 15 conclusion that -- his statement that 16 conclusions about cause and effect are 17 uncertain? 18 A. I would agree with his 19 conclusion that there is a positive 20 association, that it's highly suggestive 21 and plausible. And that given the 22 additional three years of publications 23 that I reviewed here, that there's 24 consistent evidence for a causal